

## **INVASIVE SPECIES MANAGEMENT WITH VOLUNTEERS 2012 PROJECT PROPOSAL**

Name of Project: Wetland Invasive Plant Search & Control, Ridgefield NWR

Refuge/Wetland Management District: Ridgefield NWR, Clark County, Washington

Project Description: This project would expand survey, control, and monitoring efforts to detect new wetland invasive plant threats and continue reduction of the accumulation of recently documented populations. Primary target species will be ricefield bulrush, fragrant water lily, yellow water iris, purple loosestrife, indigobush, reed canarygrass, and new species as discovered. In 2011, early detection surveys found a single new occurrence of houndstongue, the first purple loosestrife documented on Bachelor Island and along the Lewis River, the first Japanese knotweed in Campbell Slough, and many new yellow water iris occurrences discovered at higher elevations than previously recorded due to very high prolonged flooding in May and June which stimulated full iris emergence. Rapid response treated these occurrences. Iris was also discovered along the Refuge shoreline in Lake River for the first time, despite record high water which shortened the search window. In addition to continued annual searches, due to prolonged floodwater in 2011, expanded surveys need to be repeated along nearly 20 miles of refuge slough and river shoreline to document the extent of indigobush and detect any new locations of purple loosestrife, yellow water iris or knotweed. Ricefield bulrush needs comprehensive annual control to contain this plant to the refuge and continue reducing the population through hand pulling, spraying, and tilling to deplete the seed bank. In addition, fragrant water lily, although reduced approximately 75% since 2009, needs further comprehensive control and early detection surveys downstream to prevent seed and tuber spread into tidal waters. Yellow water iris needs more control on many documented occurrences, and purple loosestrife needs constant pressure to prevent spread until the seed bank is exhausted. The Refuge has developed volunteers as plant hunters, crews, and herbicide applicators to survey, control, and rapidly respond to new occurrences. Funds are requested for supplies and for salary/benefits costs for a 3-month Ricefield Bulrush Volunteer Field Leader for 2013, a 3-month STEP Invasive Plant Technician to accelerate search and applicator work with volunteers in 2012, and partial funding for a Restoration Coordinator through the Friends of Ridgefield NWR for 2013. Funds will be obligated in FY 2012. The project will take place from June 1, 2012 - Sept 30, 2013, with most work taking place in 2013.

Crews will pull and dig invasive plants. Applicators will treat invasives by boat, ATV, and backpack to avoid non-target impacts and allow re-colonization by other preferred plants. Plant hunters will search and map occurrences for entry by GPS.

Friends Groups, Volunteers and Other Partners: Friends of Ridgefield NWR, The City of Ridgefield, Gee Creek Enhancement Committee, and community volunteers.

Public Outreach and/or Environmental Education: Volunteer events will be publicized through local newspaper and web resources. Work events will include field education regarding native habitats and invasive plant impacts. Plant hunters will receive annual training and volunteer applicators will receive license recertification and applicator training.

Post-treatment Monitoring: Areas treated will be monitored for at least two years by the Coordinator and Refuge staff to measure success. Any survival of treated invasive plants will be re-treated with herbicide or hand-pulling depending on the size of the plant and encroachment level. Previous photopoints will be repeated and 10 new points established to document the degree of treatment success, and long-term progress will be monitored by comparing GPS location mapping of occurrences. Ricefield bulrush

success will be monitored with long-term monitoring plots established in 2002, one spray/disk treatment transect established in 2010, two new spray/disk bulrush density transects to be established in 2012, and by recording and mapping the number of plants pulled annually per wetland.

Criteria for Project Success: The Coordinator, STEP Field Leader and volunteer invasive plant hunters will survey 1,000 acres for ED/RR of invasive plant species. Approximately 90 acres containing target invasive plants will be spot treated: 44 acres through pulling/digging with volunteer crews and 40 acres with herbicide treatment by the Coordinator, STEP Field Leader and licensed volunteer herbicide applicators. Control work will prevent seed set, and reduce invasive occurrences treated by an estimated 70%. Approximately 400 volunteer hours are expected in 2013. Grant funds are needed to maintain the momentum of control work over the last 5 years and accomplish objectives in the Refuge's Comprehensive Conservation Plan. Funds awarded will be combined with NFWF Pulling Together Initiative 2010, and other grant funding to achieve the project objectives. Funding will also provide partial 1:1 match for a \$50,000 application for habitat restoration to the National Fish and Wildlife Foundation private source Columbia River Estuarine Coastal Fund in late 2012.

Budget:

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| Salaries and Benefits: STEP Vol Search and Applicator Field Leader, Bulrush Volunteer Field Coordinator, Habitat Restoration Coordinator | \$17,000.00        |
| Supplies: Herbicide, Fuel, PPE, & volunteer supplies & PPE   | \$3,000.00         |
| <b>TOTAL requested</b>   | <b>\$20,000.00</b> |
| Other Contributions:   |                    |
| NFWF PTI Grant 2010  | \$7,500.00         |
| NFWF CRECF 2012 (To be applied for)  | \$50,000.00        |

2/6/12